15

25

WHAT IS CLAIMED IS:

) \(\frac{1}{2}\).

A transmitter, comprising:

a detection part for detecting an identifier for identifying a band use to be received;

an identifier setting part for previously setting an identifier for identifying an expected band use; and

a control part for monitoring the detection part and the identifier setting part in each minimum unit of a line,

10 wherein

the control part periodically monitors the identifier for identifying the band use to be received in the previously defined band, and when the received identifier is different from the identifier for identifying the expected band use, the identifier for identifying the expected band use is re-established as the identifier for identifying the band use to be received.

2. The transmitter according to claim 1, further comprising:

a fault detection part for detecting a path fault, wherein

when the identifier for identifying the expected band use is re-established as the identifier for identifying the band use to be received, an alarm of an LOP (Loss of Pointer) which is detected by the fault detection part is masked.

3. The transmitter according to claim 1, further comprising:

a fault detection part for storing trace information to be transmitted from a terminal point in each minimum unit of the line, and when the fault detection part for detecting the path fault is provided, and the identifier for identifying the expected band use is re-established as the identifier for identifying the band use to be received, for identifying a change of the use within the band or an error cross-connection according to presence or absence of a change of the trace information.

4. The transmitter according to claim 1, wherein the control part notices to a maintainer when an accumulated bit error number, an error generation second number, and an error generation second number of a fixed value or more in a predetermined period reach a predetermined value or over.

20

25

5

10

15

5. The transmitter according to claim 4, further comprising:

means for judging a bit error number of a path line according to the identifier for identifying the judged band use.